27th. The pupils are considerably dilated, and the lenses are seen to be perfectly opaque.

Jan. 4th, 1842. The child has been occasionally brought to the hospital since the last report, but no change is perceptible in the appearance of the eyes. The mother is unable to satisfy herself as to whether the child exhibits any real sensibility to light. She often places a lighted candle before the eyes, but thinks that no notice is taken of it. The child is now very delicate in appearance, and its health not very good. Whether the retina is sensible or otherwise is difficult to decide. Should the health improve, and some evidence of the sensibility of the retina become apparent, it will perhaps be desirable to operate for the removal of the cataracts. This is a very interesting and extremely rare case of malformation, or rather of imperfect development of the visual organs.

66. *Cases in which, after the failure of the operation for Cataract on one eye, the vision of both eyes was restored, by operating on the cataract on the opposite side.*—M. SERRE, Prof. of Clinical Surgery at Montpellier, relates three cases, in which, after the lapse of months (in one case three years) from the unsuccessful operation for cataract upon one side, the sight of both eyes was restored by operating on the other cataract. The conditions common to all these cases were, a momentary recovery of sight immediately after the first operation, a free state of the pupil with no obstacle to the arrival of the rays of light at the retina, and, to all appearance, only a partial extinction of the sensibility of that membrane. Under these circumstances, it would seem that the sudden stimulus of the light admitted into the eye newly operated on, is sufficient to call into sympathetic action the dormant nervous energy of the retina on the opposite side. And if more observations of the same nature should present themselves, it may come to be a question whether, in certain cases of amaurosis, particularly in the asthenic form, light may not be advantageously used as a stimulant to the eye by means of glasses adapted to that purpose, Again, instead of declining to operate for cataract so long as vision remains in one eye, though in an imperfect degree, may we not attempt the operation under certain circumstances, with the very object of restoring vision to that eye? Lastly, in opposition to the ideas of some ophthalmologists, may not the excitement produced by the operation, or by the contact of light, contribute to restore vision, in some cases of cataract complicated with incipient amaurosis?—*Lond. and Edin. Monthly Journ. Med Sci.*, May 1842, from *Gaz. Méd. de Paris.*

67. *Melanosis of the Eye.*—The following case of this disease, operated on by Dr. BYRON, Surgeon to the Navan Infirmary, was communicated to the Surgical Society of Ireland.

"Richard Donnelly, a labourer, aged 21 years, was admitted into the Meath Infirmary on the 24th March, 1827. Hair and complexion dark, his left eye was affected with cataract, and with what appeared to be amaurosis; the conjunctiva was extensively chemosed, and the eyeball somewhat enlarged; the inflammation and lachrymation inconsiderable. He complained of headache, his pulse was 60 and full, his general health was good, and his constitution robust; he had had no vision in the eye for a year; the other symptoms were only of a week's standing, and had been produced by striking the eye against a stick. Three weeks afterwards it was deemed expedient to perform the operation for staphyloma; as the functions of the eye were irretrievably gone, it was hoped the eye would, after the discharge of the humours, and in consequence of the enlarged vessels being unloaded, probably sink into the socket, and give no further trouble. The operation was accordingly performed on the 27th March, somewhat more than three weeks from the time of his admission. The sclerotic and choroid coats being divided three lines behind the ciliary ligament, and a large segment made of the ball, which included within it the lens in an opaque state, with its capsule and the iris; the vessels in general bled freely, and some coagulated blood found its way into the anterior cells of the vitreous humour. He had an anodyne at bedtime, but notwithstanding, suffered severe pain in the eye and slept none. An emollient poultice and water dressing were applied. The wound discharged pus and bloody matter in moderate quantity, and for some days the swelling appeared to be gradually diminishing; however, on the 29th April, about a month after the operation, the report was, that the wound had filled up and the eye was as large as before the operation, having an uniform fungous aspect. At this time he suffered little uneasiness and wished to go home—he was therefore discharged.

"On the 2d February, nine months afterwards, he again presented himself; the tumour had very considerably increased in size within the preceding three months, and was then as large as a middle sized orange. Its circumference at the base, including the lids, measured nine inches, in the centre seven inches and a half, and at the top six inches; the upper eyelid was extended for two inches over it, and the under eyelid for one inch; and they both adhered to its surface through the medium of the conjunctiva, which was moveable upon it. The anterior surface of the tumour had lost its smooth uniform condition, and now presented an irregular aspect from the existence of three protuberances upon it, each about the size of a walnut. The most prominent, and at the same time, the most internal of these, was of a dark purple colour, and bled when touched; the others had a somewhat less vivid tinge, intermixed with a light pink shade; and the base of the tumour partook of the same colour. To the touch it was firm, elastic especially in the situation of the projections, and in some places hard. The patient stated that it had sometimes discharged so much as a pint of blood at once; his general health was somewhat impaired. A fortnight after this report, on the 16th February, he was re-admitted into the infirmary. At that time the disease was evidently advancing with rapidity. The central and external protuberances had increased, and presented in addition to their former colours, a greenish aspect; their surface also was partially ulcerated; three ulcers appeared upon them, and one upon the lid itself, near the eyebrow. All the ulcers discharged a small quantity of ichor, and the tendency to hemorrhage appeared in a great measure to have ceased—he now for the first time, complained occasionally of severe pain in the tumour shooting to the back of his head; and there was a slight degree of chronic inflammation of the upper eyelid. His pulse was 80, and moderate, and his general health, though somewhat impaired, had not suffered materially.

"The operation of extirpation of the globe was performed on the 28th February, one year from the time of his first presenting himself at the infirmary, and two years from the original commencement of the disease in the eyeball.

"*Operation.*—An incision was first made from the external commissure of the eyelid, to the external angle of the orbit; this from the elongated state of the lids was fully an inch and a half in length. An incision was next carried through the conjunctiva covering the tumour, from the inner angle of the eye along the hairy margin of the under eyelid to the outer angle, where it joined the first incision. A similar division of the conjunctiva was made above along the border of the upper eyelid which also joined the first incision at the outer angle of the orbit.

"The conjunctiva and lids were now stripped from the tumour above and below, until its surface was completely exposed all round, as far as the margins of the orbit. The tendon of the superior oblique muscle was next divided on the left forefinger, and subsequently that of the inferior oblique muscle in the same manner. The division of these tendons allowed the fingers to be passed freely round the orbit in all directions. The remaining attachments of the tumour, which were extensive, were afterwards divided, and the diseased mass, which was of great size, its posterior half filling up the orbital cavity, was removed.

"The os planum was perforated for a space as large as the nail of the forefinger, and the edges of this perforation were rough. There was a smart hemorrhage from the ophthalmic and infra-orbital arteries; this was stopped by compression with lint and the fingers during the time that some portions of thickened fat and cellular substance were being removed. The orbit was then filled with lint and the bleeding quickly ceased. A portion of the upper eyelid including the ulcer was excised. The patient lost about eight ounces of blood. He sustained the operation courageously.

"*Examination of the tumour.*—The report taken at the time stated it to be a diseased structure '*sui generis*,' resembling neither cancer nor fungus hæmatodes. I have now no hesitation in pronouncing it to have been a good example of melanosis—the report goes on to state that there was no appearance whatever of the lachrymal gland, and scarcely a vestige of the healthy eye; in place of the eyeball was a fleshy firm mass, on the surface of which ran the straight and oblique muscles, increased in size, particularly the obliquus inferior, abductor, and adductor. Beneath these was a strong tendinous fascia, or fibrous membrane, apparently the sclerotic coat extended and altered in its nature, on stripping off which the surface of the tumour was exposed; the entire superficies was rendered irregular by numerous projections or tubercles of various sizes, from the dimensions of a pea to that of a chestnut, the larger being of a dark-brown or blackish colour, the smaller of a light-brown hue. Between these tubercles was interposed a white demicartilaginous substance; the larger projections on being divided exuded a matter similar to the pigmentum nigrum of the choroid coat, and were composed of a more dense structure of the same nature; the centre of the tumour, for an extent equal to at least one third of the entire mass, was occupied by a similar substance. The smaller tubercles on being cut into presented an aspect of the same sort, but lighter in colour; some of them were firm to the touch, others soft; the largest ones were generally softest. The optic nerve was sound, but narrowed near its junction with the eye. As to the termination of the case, he progressed favourably to a satisfactory cure. He was treated like other patients who have undergone operations of magnitude—his fever was moderate—his pulse never rising above 80—for some days he complained of a slight headache, which did not, however, interrupt sleep, and he was somewhat annoyed by a swelling of the eyelids and left side of the face.

"On the tenth day these symptoms had disappeared; the entire cavity looked healthy and was granulating rapidly: the denuded bone was covered and the eyelids had regained their natural size, the upper lid appearing at this time to be scarcely of sufficient size to allow of its covering the exposed socket. The edges of the wound in the upper eyelid had approximated.

"On the twentieth day half the cavity had been filled up—on the sixtieth day there was no longer a cavity in the place of the eyeball, and the lids adhered to the granulations proceeding from the socket, and thus covered the socket so as to diminish deformity. On the eighty-eighth day the wound was completely healed, and the appearance of the parts good. There was a slight natural secretion from some small portions of conjunctiva which had remained adherent to the tarsal cartilages. He was *discharged cured*, and continued well, and perfectly free from any return of his complaint, as I had an opportunity of ascertaining for nearly four years afterwards, when he was carried off by a *fever*.

"Mr. Houston said the details of some other cases of melanosis were given by Dr. Byron in the paper which he held in his hand, but as he understood from Mr. Adams that they would be shortly published, he would not take up the time of the meeting by reading them. He wished to add that a preparation was preserved in the Museum of the College, of a case similar to that under consideration; the morbid specimen had been presented by Mr. Palmer, and the account of the case will be found in the catalogue of the Museum; this patient lived for seven years after the operation, and, on examination after death, unequivocal signs of the disorder were found in several of the internal organs.

"Mr. Adams said, the case just read appears to me a very interesting example of malignant disease of the structures of the globe of the eye combined with melanotic deposits, and we derive some little encouragement from the relation of such facts to undertake the very severe operation of extirpation of the eye. There were three cases, as far as the affection of the organs contained in the orbit was concerned, in the Richmond Hospital, which were somewhat similar to that related by Dr. Byron, but were not so fortunate in their termination. In one of these cases the operation of extirpation was performed, and the result was unfavourable; in the other two we had to congratulate ourselves that no operation had been resorted to, as the *post-mortem* examination showed extensive malignant disease of the liver, with melanotic deposits in other organs. The preparations, showing the morbid alterations of structure, have been preserved by our learned curator, Mr. Smith. One of these cases, Levy, was under the care of the late Dr. M'Dowell; the other was a patient of our learned Vice-President, Dr. O'Beirne. He will be able to furnish you with more accurate particulars relating to it than I can. The third case was under the care of Dr. M'Dowell. With respect to the first case, that of Levy, ætat. 67, he had the disease of the eye for six years, and the operation of extirpation was performed; some months afterwards he died with symptoms of disease of the brain, but no *post-mortem* examination was permitted. The interior of the globe of the eye was filled with melanotic matter, mixed with portions of a firm, white, scirrhoid structure; the morbid mass was still enclosed in the sclerotic coat. Dr. O'Beirne's case, Larrify, was a man of 60 years of age. He had disease of the eyeball, which was much enlarged, and the man had been blind for many years —he died hectical. Upon dissection it was found that the structures contained in the orbit had undergone complete disorganization, the result of malignant disease. A vertical section of the tumour is preserved in the Museum of the Richmond Hospital, and this section exhibits a mixture of the matter of melanosis, with the white fibrous tissue of scirrhus, producing, as Mr. Smith remarked, an appearance not unlike certain kinds of marble. The tumour was of considerable size, being, in its vertical diameter, about three inches; and in its antero-posterior four inches; it had projected far in front of the orbit, and had penetrated the optic foramen; the remains of the cornea and sclerotic were found in the most inferior part of the tumour. The circumstance in this case, most worthy of the attention of the practical operating surgeon is—that, coinciding with this malignant disease of the eyeball, the liver was affected with a mixture of melanosis, and the tubercle circumscripta, or white tubercle of Dr. Farre. The spigellian lobe was perfectly black from infiltration, with melanotic matter surrounded with a cyst. This lobe was increased eight or ten times its normal size—it was in fact the size of a small melon; throughout the remainder of the liver were many tubercles, some white, others black, and there were others again, presenting both colours. A careful examination of the brain discovered no lesion there; but the optic nerve was implicated in the disease as far back as the optic foramen, which was much larger than this aperture normally is. He believed the valuable communication brought before the Society last winter by his friend, Mr. Smith, would be in the recollection of the members, in which Doctor M'Dowell's case of melanosis of the eye, combined with extensive melanotic deposits in the internal organs, was detailed and commented upon. The preparations are preserved in the Museum of the Richmond Hospital, and are well worth examination. Mr. Adams said before he sat down he wished to mention that Dr. Young, Surgeon to the Monaghan Infirmary, had given him some of the details of a case of melanosis of the eye, in which he had performed the operation of extirpation of the eye, and, as Dr. Young was present, he was sure he would have much pleasure in communicating the particulars to the Society.

"Dr. Young said he regretted he had not the notes of the case (to which Mr. Adams had alluded) by him; as far as his recollection served him the patient was a man aged about 50, but looking older, who applied to him, with a small livid tumour, about the size of a pea, growing from the conjunctiva; it was easily removed with a scissors; the patient returned in some months with a second tumour; it was not, however, seated in the cicatrix, but on the opposite side of the cornea, and this he also removed. In about five months the patient again returned; he now complained of violent pain in the head; the eyeball was enlarged, had a tuberculated appearance, and protruded from the socket; the pain was intolerable; I told him that his only chance of relief was in the extirpation of the eye, to which he refused to consent; he went away, and, after some time, again returned, and begged of me to perform the operation, which, after some time, I did; the orbit filled up, and the wound healed, as in the case described by Doctor Byron. Some months subsequently, however, a tumour formed in the site of the parotid gland, and the patient died.

"Dr. Jacob said he had brought with him a drawing taken a number of years ago, which he exhibited to the meeting. The patient was a woman between 60 and 70 years of age; there was a growth of rounded granular masses projecting beyond the lids, which was so much like malignant structure that he recommended its removal. There was little blackness superficially, but it became quite evident when a section was made of the tumour, he has no doubt that it was a case of melanosis of the eye: 12 months afterwards he saw the patient well. He had a case lately of melanosis in a young man which was in the form of a single black dot, about the size of a pea, situated upon the lid, which commenced as a small vascular tumour: he removed it, including a large piece, by means of a V incision: the wound did not heal by the first intention, but cicatrization was effected with very little deformity. There has been no return of the disease in this case.

"Mr. Adams—As melanosis of the eye is not much spoken of by English authors, at least the ordinary works on diseases of the eye do not give many authentic cases of this disease, I may therefore mention, that last summer I had under my care in the Richmond Hospital, a man aged 68, Garret Doyle, affected with melanosis of the lower eyelid of the right eye; it had originated in a small tumour about the size of a black currant in the lower eyelid, and had remained stationary for some years; it then began to increase, and upon its sides and all round, similar tumours appeared, so that when the man was admitted into the Richmond Hospital, it had attained the size of a small orange; it was dark coloured, and lobulated throughout, and bled whenever it was touched; its pedicle was very small and therefore it was readily excised; much of the eyelid was however of necessity removed with it, the hemorrhage was easily restrained, and the wound speedily healed—the man left the hospital, and we have not since heard of him—a section was made of the black lobulated mass which was removed. Mr. Adams said, that the first drawing he held in his hand gave an excellent idea of the external appearance of the tumour, and the expression of countenance of the patient; the second drawing showed the structure of the entire of the morbid mass, the colour of the tumour externally was black, but on a section of it, exhibited a white interior. The reverse was the case in the melanotic tumour, presented this evening by Dr. Jacob, for, in his case the tumour was only black in the interior.

"Mr. Rumley said he regretted Mr. Palmer was not present; however, he had a perfect recollection of the case to which Mr. Houston had alluded—several surgeons had refused to remove the diseased eye, Mr. Palmer performed the operation, and it was so successful, that the patient lived seven years afterwards. On examination after death, there were evident signs of the disease in several of the internal organs.

"Dr. O'Beirne said, although the hour for adjourning had arrived, he could not resist stating some of the particulars of a case which he has no doubt was one of melanosis, and which occurred so far back as the year 1818. The patient, a gamekeeper in the employment of the Earl of Granard, was completely blind of the right eye; on examination he found a granular tumour exactly covering the cornea of a perfectly black colour, and in shape and size resembling a small blackberry; it was moveable, and could be raised from the cornea by means of a forceps. He lifted it with a hook, and then dissected it carefully off: immediately afterwards the patient said he had some vision in the eye: the cornea was delicately flocculent, but cleared perfectly under the application of a solution of nitrate of silver, and in a fortnight the patient was able to return to his employment, and to shoot with his usual accuracy. This man was alive three years afterwards, but he had not heard further of him—at that time the disease was but carelessly observed, and not named. He (the President) sent the tumour as a curious one to Sir P. Crampton, who will probably recollect it and the account given of it."—*Dub. Med. Press*, April 20, 1842.